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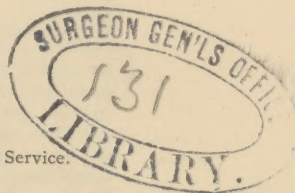
THE
PHARMACOPŒIAL NOMENCLATURE.

READ AT THE TWENTY-EIGHTH ANNUAL MEETING
OF THE AMERICAN PHARMACEUTICAL ASSO-
CIATION, HELD AT SARATOGA, N. Y.

✓ BY

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THE PHARMACOPŒIAL NOMENCLATURE.*

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A CORRECT, exact, and significative official nomenclature is one of the most necessary features of a pharmacopœia.

No nomenclature can be correct, exact, and significative which is constructed from a living language. Whatever tongue may be adopted for the text of a pharmacopœia, whatever may be its native nomenclature, whatever terms may be used in prescription writing, and no matter how frequently or rarely the pharmacist may pronounce the technical official titles (made up from the dead languages), the necessity for such titles is obvious.

The words composing a living language undergo change in a wonderfully short time. How many of us understand the language of our forefathers? How many in our days know what our most common words signified a century ago? Every word in a living tongue is liable to be used with many different meanings. The older the word, the more varied is its latest significance from the idea it originally conveyed. In America a common purely English word may be used in a sense widely different from that in which it is used in England. A living language changes because it is living. It is, therefore, unfit for use in constructing a scientific, technical nomenclature.

A dead language is unchangeable, and hence its use in all scientific terminology, be it in botany, chemistry,

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theology, law, or any other department of human observation and reasoning. Of the dead languages, Latin is preferred because the modified Latin which scientists have been for ages forming is full of brief and expressive words adaptable to everything which has passed into the history of human knowledge.

The Romans were a practical people, with an extended real knowledge of the things and affairs of the world then known. They were familiar with the condition and life, inventions, and institutions of every people with which they came in contact, and which they conquered and ruled over. As orators and scholars, statesmen and lawyers, they developed their language into a marvellous variety and richness of thought and ideas, into a power and clearness of expression never surpassed by any other. And when the old civilization and its language perished in the ruins of Rome and were buried under the mediæval barbarity, was it not through the dead Latin cultivated in the seclusions of convents that the traces of that old civilization were not forever lost, and that humanity was saved for the new civilization which we enjoy, and for the development and perpetuation of which, in the limited sphere in which we are acting, you are here assembled to-day.

By adopting a Latin nomenclature, we are enabled to make it, by common consent, absolutely certain that there can be no mistake as to what particular object we refer to. We can arbitrarily and permanently give to any Latin word a specific meaning which that word will not fail to convey at any time, because a word from a dead language is above the ideas that *change*, as of necessity do all names and ideas of a living language. Moreover, when we adopt for any particular thing a name which in itself has no relation to and cannot be influenced by the ideas of the native tongue, we may not only choose a name which can convey no other meaning than that intended, but in selecting it from such a developed and classic language as Latin, we are even enabled in most cases to make the name chosen a significative as well as a correct one.

In a perfect scientific nomenclature, then, each term used should convey not only a *correct* and *exact* concep-

tion of the thing to which it applies, but as *full* an understanding of the nature of that thing as possible. Beyond this, a Latin nomenclature has no value in a pharmacopœia. If our Latin official names are not as absolutely explicit as they can be made, they do not fulfil their use. Other pharmacopœias go so far as to insist upon a *Latin text* as well as Latin titles. We all know why; and in our pharmacopœia, where the text is English, the Latin titles should by all means be sufficient in themselves so far as this is practicable, for we should not rely upon the text to remove doubt.

If we could construct intelligible and brief English names, which in every instance would carry with them as accurate and full knowledge as Latin names can be made to do, we might properly dispense with our Latin titles, provided we are willing that our pharmacopœia shall be addressed exclusively to English speaking people, and at the same time willing to sacrifice our knowledge of the key which enables us to readily learn what other pharmacopœias are. But we cannot construct a satisfactory and safe nomenclature in English. To become practically convinced of the fact, it is only necessary to make the attempt. It would result in confusion and the defeat of systematic classification.

At the same time we want English official titles in addition to the Latin ones. The *English* official titles are those which we will most frequently use, and with comparatively few exceptions, those at present in use are probably as good as any that could be adopted. The Latin official titles are chiefly to serve as definitions of the English ones, instead of *vice versa*, as many suppose. Looking at the relation of Latin titles to the English ones in that way, I would rather say "*Calomel*" than "mercurous chloride" or "mild chloride of mercury," because it is unique, brief, and safe; but I would make the Latin name one which tells us what calomel really is.

While, however, we should strive to make our pharmacopœial nomenclature as perfect as we may, no change should be made which is so great as to be liable to cause error or misunderstanding. The only changes that ought to be made, are such as may be necessary to obviate offences against knowledge, and to make our present

titles as clear and specific as possible, without transforming them beyond ready recognition. Above all, we should not give to any substance a name which conveys a positively erroneous conception of what it really is.

The principles which should govern us, as far as we may safely go in the revision of the officinal titles, are these:

I. *No name used should be one that does violence to established knowledge or perpetuates ignorance.*

Against this rule we find several offences in our present nomenclature. Among those which in the opinion of the writer should be at once removed are the following:

a. *Volatile oils* should no longer be grouped with the fixed oils—by reason of incorrect nomenclature. This grave error ought not to be perpetuated. "Volatile oils" not only are not "oils" or fats, but do not even resemble them any more than they resemble other liquids, and the points of difference between the volatile oils and oils are striking and great.

The only remedy for this confusion, however, is a radical one—the most radical change of all that the writer recommends, because it necessitates the introduction of a name which, although not new, has heretofore been unknown to us American pharmacists in a Latin form. It is unfortunate that in every civilized country the "volatile oils" received similar and corresponding names, since they are all wrong. It is probably impossible to introduce a new *English* name to take the place of that of "volatile oil," and it is not proposed to attempt it. But a Latin pharmacopœial name can surely be adopted, which will be distinctive. The writer has, however, been unable to find a perfect scientific name, and finds himself obliged to recommend the one adopted in the Swedish and other pharmacopœias, viz., "*Ætheroleum*," which is at once understood and distinctive, and readily becomes familiar.

Many drugs contain both a fixed and a volatile oil, and if both are to be called "*Oleum*," confusion results. The retention of that name in designating volatile oils, besides being an error, is a great hindrance to students. *Oleum Myristicæ*, as distinct from *Ætheroleum Myristicæ*, would be far more clear than to say "*Oleum Myristicæ*"

Expressum," as distinct from "*Oleum Myristicæ*," or from "*Oleum Myristicæ Æthereum*."

I know from personal experience that students frequently mistake a volatile oil for a fixed oil, and *vice versa*, when a distinctive name for each would render such confusion out of the question.

If any better name could be suggested (one which does not contain the "*oleum*" in it at all), it should be adopted. If not, *ætheroleum* is decidedly better than "*oleum*."

b. Among the "*Acida*" we have: "*Acidum Sulphuricum Aromaticum*!" The English title "*Aromatic Sulphuric Acid*" being established and sanctioned by usage, is permissible, and will no doubt be continued; but to construct a Latin title, such as the one in question, seems to be inexcusable. It surely is not an *Acid* at all, and instead of being called an *Aromatic Acid* (!) it should be called "*Tinctura Aromatica Acida*," which it is.

c. The name "*Tinctura*" should not be applied to simple solutions of inorganic substances, but should be restricted to the tinctures proper, as the term "*tincture*" is pharmaceutically understood. Among the fifty-seven tinctures officinal in the present pharmacopœia, there are *only three* which do not properly come under the definition of their title; and instead of adding to these three we should change their names to something else, so as to henceforth leave the group perfect and distinct. *Tinctura Ferri Chloridi*, *Tinctura Iodinii*, and *Tinctura Iodinii Composita*, the three exceptions, are properly speaking *spirituous solutions*, and *not tinctures*. Why should this great group, to which *fifty additions* have been recommended to be made in the forthcoming pharmacopœia, be marred by the insertion in it of three or four preparations that do not belong to it except in name?

The writer believes that the most perfect pharmaceutical groups could be made of all the official preparations. Among the exceptions to a proper nomenclature in that respect existing in the present pharmacopœia are the following:

d. Among the "*Aquæ*," we find "*Aqua Acidi Carbonici*," "*Aqua Acidi Carbonici*," "*Aqua Ammonia*," and "*Aqua Chlorini*," all of which should be called *solu-*

tions, so as to leave only water and the aromatic waters under the head of "Aquaë."

e. The "cerata" and "unguenta" should be put under one head (preferably that of "unguenta"), because it is impossible to draw a strict line of separation between them: in fact, the present pharmacopœia calls some cerates ointments, and some ointments cerates already. (See Cerat. Zinci Carb., Unguen. Zinci Oxidi, and Unguentum Cantharidis.)

f. "Linimentum Aconiti" is a *fluid extract*, and should be so styled without reference to its use.

g. The "Liquores" are mostly *solutions*, and should be so termed, together with all other solutions of chemicals and gases in water, except the acids; while those of the present "liquores" which are *not solutions*, together with other preparations resembling somewhat the solutions, tinctures, mixtures, spirits, etc., and yet not properly belonging to either, should be called *liquores*.

h. The "spirituous solutions" should form a separate group, consisting of "Solutio ferrici chloridi spirituosa" (tincture of iron), etc.

i. Among the "spiritus," we have only six that are not solutions of volatile oils in alcohol. Of these "Spiritus Ætheris Compositus," and "Spiritus Ætheris Nitrosi" should be called *Æther Spirituosus*, and *Æther Nitrosus Spirituosus*, respectively; the other four are liquores, or tincturæ. (The tincture is the "Spir. lav. comp.") All the other *spiritus* are solutions of volatile oils in alcohol, and to such only should the name spiritus be applied.

But few of the changes proposed would be striking and unfamiliar, and none of them would be difficult, as they would all clearly resemble the old names, and would be at once intelligible.

There are other isolated instances of misleading or incorrect names, which will be found in the list accompanying this paper.

2. *Each name should be clear and descriptive, as far as consistent with necessary brevity.*

This rule, which requires that each title should have a *self-evident* and *comprehensive* meaning, is sinned against in various ways.

a. In the names of all drugs consisting of distinct parts or organs of plants, the particular part to be used should be designated in each case, for the following reasons: Of over thirty plants, from which official drugs are now obtained, more than one part or organ of each is separately officinal and in current use, *and, in many cases, more than one organ is separately official*. It is absolutely necessary to distinguish between Hyoscyami Folia and Hyoscyami Semen, between Belladonnæ Folia and Belladonnæ Radix, etc. The proposition which has been made to drop one of the drugs (parts official), and to give the retained part the generic name (as, for instance, to drop "Conii Folia," and then to give to "Conii Fructus" the generic name *Conium*), is certainly wrong. In the United States, where so many medicinal plants are being constantly introduced into the practice of medicine, and where several distinct parts of the same plant are so frequently separately used, it would seem to be no less necessary than useful to designate the "part used" in every case, to avoid all ambiguity. It is not improbable that of many plants, of which at present only one part is used, other parts may hereafter be introduced into the current materia medica, even if not in the pharmacopœia, and in our country it will not do to ignore the non-official officinal drugs to the extent of framing the official nomenclature without regard to them.

By naming the particular part of the plant in each case, the nomenclature of the whole vegetable materia medica would be uniform, exact, and clear; students and apprentices in drug-stores would at once learn an important part of this branch of their studies in the very nomenclature itself, which is no small matter; we would be in perfect harmony with science; we would not appropriate botanical names, and use them in an entirely different sense; we would be in accord with some of the best pharmacopœias of the world in this particular, and in advance of them in that we would put the name of the plant first, and the part used last, instead of *vice versa*; and yet the new names would not be inconveniently long, while, of course, they would be as easy to know and remember as the present names. It is not more difficult to say *Myris-*

tica Semina than to say "Myristica," or *Senna Folia* than "Senna."

It would, in the writer's opinion, be advantageous to say *Maranta Amylum* instead of "Maranta," not only because the latter is *not* a universally understood name for the drug "arrow-root," but because *Maranta* is the generic botanical name of the *plant* from which the drug is obtained, and because the proposed name at once *tells us just what the drug is*.

Changes under this rule should, however, not be extended to drugs, the officinal names of which are already quite clear, as "Ammoniacum," "Asafœtida," "Lactucarium," etc. These names are not applied to anything else, and are universally understood.

In cases where the whole plant is used, it would be sufficient to use only the generic botanical name, provided it be understood that the generic name will *not* be used alone in any other case.

b. A great improvement can be made in the *Latin* nomenclature of the medicinal chemicals by making it correspond to the modern and *generally adopted* English names of the new chemistry, in accordance with which text-books, teachers, and chemists say "mercuric chloride" instead of *chloride of mercury*, "ferrous bromide" instead of *bromide of iron*, and so on all through the list. We would then have *ferrosus sulphas* for "ferrous sulphate," *ferricus sulphas* for "ferric sulphate," etc. It would then also be sufficient to say *syrupus ferrosi chloridi* instead of "syrupus ferrosi chloridi viridis," *ferrico-ferrosus phosphas* instead of "ferri phosphas subcœruleus," and *ferricus phosphas* instead of "ferri phosphas albus."

The Latin names of chemicals should show their composition as unequivocally as possible. "Hydrargyri chloridum" signifies a chloride of mercury, but which one? "Ferri phosphas" means a phosphate of iron, but does not tell us which one. "Ferri chloridum" does not indicate which of the chlorides of iron is meant, and so on. We want names which, so far as the character of our pharmaceutical chemicals admits, shall unmistakably determine what particular chemical is intended. The nomenclature introduced by Berzelius accomplishes perfectly this result, and yet is not in conflict with either

the new or the old chemistry. Hence, even if we may now be on the threshold of the most important chemical discoveries, it does not seem probable that such discoveries will for a very long time to come, if at all, render this nomenclature incorrect, or afford us a better one. The Berzelian nomenclature, strangely enough, *brings the different pharmaco-chemical nomenclatures in use in different countries together, and can be readily understood in all of them.* For these reasons, it has been recommended by the International Medical Congresses as the nomenclature best adapted to the proposed universal pharmacopœia, or for adoption in the several pharmacopœias of different countries to insure international uniformity.

It fortunately so happens that the changes necessary in our present pharmacopœial nomenclature, in order to accomplish this end in view, are comparatively slight, and will, as a rule, result in names, the abbreviations of which are exactly the same as now.

The changes required are simply in the ending of that part of the name which refers to the basylous radical, for we already say "phosphas," "sulphas," "chloras," etc. The modern English chemical names of acids, bases, and salts are in accord with the Berzelian system, and correspond exactly with the Latin names now proposed. Thus we say ferrous chloride, ferric chloride, potassic nitrate, cupric oxide, arsenious acid, arsenic acid, ferrico-ferrous phosphate, etc. All that is necessary, therefore, is to literally translate these names into the corresponding Latin names. This would give us ferrosium chloridum, ferricum chloridum, potassicus nitras, cupricum oxidum, acidum arseniosum, acidum arsenicum, ferrico-ferrosus phosphas, etc.

The Latin names of ox-acids already have the terminations "-icum" and "-osum," and the bases and salts should be named according to the same system. *Sulphuris acidum* would be unintelligible, while *Acidum sulphuricum* and *Acid. sulphurosum* are quite clear.

Incidentally in the proposed nomenclature, that part of the name which refers to the basylous radical might be looked upon as indicating its atomicity, for we could consider hydrargyrosium as a monad, hydrargyricum as a

dyad, ferricus as a triad (or hexad), etc.; but this is of trifling importance in comparison with the grand result aimed at.

Should the proposed changes be made, we could dispense with the additional explanatory or distinguishing adjectives that are now necessary to remove ambiguity. In the cases of poisons, it would, however, be safest, if not quite necessary even with this new nomenclature, to retain the "Mite," "Corrosivum," "Rubrum," "Flavum," etc.

Physicians will experience no difficulty on account of the adoption of the new nomenclature, for it will *at once be seen that the abbreviations in prescription writing would be precisely the same as now in nearly every case*, and physicians always abbreviate in writing prescriptions.

The chemical nomenclature recommended is not new. It was originated by Berzelius, and is substantially that recommended more or less highly, and to a greater or less extent *followed*, by some half a dozen of the best pharmacopœias in the world; Prof. W. A. Miller, of Kings College, London, whose work on chemistry is so generally used, Prof. John Attfield, Prof. John M. Maisch of our own country, and numerous other authorities. The only new feature I have to offer is that of reversing the order in which the two words of each name follow each other in the *Latin* names of the Berzelian nomenclature as now used, so as to say Ferrosus Sulphas instead of Sulphas Ferrosus, to make them correspond with the *English* names, and bring all preparations of the same metal together in one place when alphabetically arranged.

The schools and colleges are teaching the Berzelian chemical names, and their students learn to understand the difference between, and to say *mercuric* and *mercurous*, *stannic* and *stannous*, *ferric* and *ferrous*, etc. That this nomenclature in chemistry is infinitely better than the indefinite "chloride of mercury," "sulphate of iron," etc., is obvious enough; it is also preferable to the names with the prefixes "proto-," and "per," and "sesqui," etc. If this be *not* so, then let the schools and colleges go back to the old plan; if, on the other hand, the new teaching is correct, then let us follow it in the pharmacopœia, too, in justice to the younger members of the pro-

fessions. Conservatism is necessary in such a matter as the preparation or revision of a pharmacopœia ; but that conservatism, in the writer's opinion, should not be so rigid as to actually hinder progress.

3. *No official name is proper which is capable of essentially different interpretations, or which has been, or is applied to more than one thing.*

Many of the defects already pointed out are also in opposition to this principle, as, for instance, the names of chemicals in cases where both "-ic" and "ous" compounds of the same radical exist ; the title "Oleum," when applied to volatile oils, is another breach of this rule ; and so are the botanical generic names of plants, of which several distinct organs are separately used, when the particular part intended is not specified in connection with such generic names.

The official *English* name of a vegetable drug, or of a chemical, should be the correct scientific one, rather than the local or vulgar name. Thus *Taraxacum* instead of "Dandelion," *Podophyllum* instead of "May-apple," *Spirea* instead of "Hardhack," etc. Many of the vulgar local names are applied to several different plants, and in the present Pharmacopœia we find the name "Indian hemp" applied both to the *Cannabis Indica* and to *Apocynum Cannabinum*. Besides, some of the vulgar local names are barbarous.

The discarded English official names should be transferred to the synonyms.

4. The nomenclature should be one which enables us to combine to the greatest practicable extent alphabetical order with systematic classification ; and to that end, since nearly every title consists of more than one word, the generic should precede the specific, as logic demands of every scientific definition.

The Pharmacopœia being primarily established as an aid to the physician, it appears to the writer that the present classification of the remedies in the official list is wrong. The only perfect classification of the preparations would be to put them all under the head of their respective active constituents. To put all the tinctures in one group is quite correct alphabetically and pharmaceutically, but also quite incorrect in every other respect.

All the different forms in which one and the same remedy is administered internally, should be placed together under one head as far as practicable. For instance, digitalis is a distinct therapeutic agent, but all the preparations of digitalis are simply other forms of the remedy digitalis, and should be classified accordingly. A classification based upon this principle could very properly be effected without disturbing the alphabetical order, so far as such simple preparations as the tinctures, extracts, etc., are concerned. It would clearly carry with it great advantage to the physician were we to say Hyoscyami folia, Hyoscyami tinctura, Hyoscyami extractum, Hyoscyami fluid-extractum, etc., thus putting them all together. This arrangement may perhaps be somewhat disadvantageous to the pharmacist, but that is surely of secondary importance only. Thus I would place that part of the name first which indicates the therapeutic base in the names of all simple acetæ, solutiones, decoctæ, extracta, fluid-extracta, infusiones, oleo-resinæ, pilulæ pulveres, resinæ, spiritus, succi, syrupi, tincturæ, trochisci, vina, and all other similar preparations. Should this be done, polypharmacy in the pharmacopœia and authorized machine prescribing would thereby receive an effective check, because, although such formulæ as that for compound cathartic pills could still be retained in the pharmacopœia, they would necessarily be placed by themselves, and in that way singled out for special scrutiny.

A classification of this kind would not—and for obvious reasons—in all cases bring an alkaloid under the head of the crude drug from which it is obtained; but, as the therapeutic effects of alkaloids are frequently different from those of the drugs from which they are derived, that circumstance does not vitiate the system.

5 *Harmony with the rest of the civilized world is desirable so far as attainable without sacrifice of clearness and correctness, and without too violent changes.*

a. The question as to whether or not the Latin names "Antimonium," "Potassium," and "Sodium"—Latin in appearance only—shall be changed to Stibium, Kalium, and Natrium, so as to be in harmony with the nomenclature used on the European continent, and with the uni-

versally recognized chemical symbols, could not be ignored in a paper on pharmacopœial nomenclature.

The names Stibium, Kalium, and Natrium, are used everywhere except in England and the United States, and from them the symbols Sb., K., and Na., were obtained. Their adoption does not necessarily follow from the adoption of the propositions already set forth, nor is it proposed to attempt to change the *English* names antimony, potassium, and sodium which are fixed. A change in the *Latin* names of these three metals would, however, be exceedingly desirable, for it is only in the pharmacopœias, or in medicine, that we are at variance with science in respect to the chemical symbols, and that only in these three names. If adopted they would give us *Stibiosum Oxidum* instead of our present "Antimonii Oxidum," *Kalicus Nitras* instead of "Potassii Nitras," and *Natricum Chloridum* instead of "Sodii Chloridum." The English names would remain: Antimonious Oxide, Potassic Nitrate, and Sodid Chloride.

b. "Alumen" is the time-honored name of the "Sulphate of Aluminium and Potassium," and should not be given to the ammonia alum, as in the pharmacopœia of 1870.

c. *Bromum*, *Chlorum*, and *Iodum* are the correct Latin names of Bromine, Chlorine, and Iodine, and they correspond with the "Bromidum," "Chloridum," and "Iodidum," and with "chloras," etc., which we employ.

d. *Manganum* is the proper Latin name for Manganese.

e. *Acidum Boricum* is clearly the proper Latin name for Boracic Acid, for it is an acid of Boron and not of Borax.

6. *Euphony* should not be ignored when it can be easily satisfied.

The names of alkaloids should end with *ina* instead of "ia."

The present termination (*ia*) is exceedingly awkward in many ways. Several drugs, the names of which have that ending, contain alkaloids, which consequently receive the same names, as sanguinaria, lobelia, etc. Besides, there are a number of other names ending with *ia*, such as *Aca-cia*, *Gaultheria*, *Gambogia*, etc., so that the *ia* is not at all a

distinctive termination as generally supposed. Again there are a number of alkaloids the names of which, when given that ending, are so very awkward that they cannot fail to strike most of us as very good to get rid of, as papaveria, parteia, codeia, hyoscyamia, conia, narcotia, etc. Finally, the termination *ia* is not uniformly adhered to even in America, where it has had its chief support.

The ending *ina*, however, which is not a great change from the *ia*, and which is more natural and euphonious, puts us at once in harmony with the rest of the world, for *ia* is not used to any great extent in England, and on the continent of Europe they say morphina, morphine, or morphinum; quinina, quinine, or quininum or (chinina, etc.). The ending *inum*, it is pretty generally conceded, should be reserved for the names of neutral substances.

Euphonious names will invariably result when constructed with the ending *ina*, as compared with the same names having the ending *ia*. We would get: papaverina, sparteina, codeina, hyoscyamina, conina, narcotina, sanguinarina, lobelina, quinina, morphina, etc.

To retain the ending *ia* in the nomenclature of the alkaloids because the old word ammonia has that ending, on the ground that the alkaloids are derivations of ammonia, is unwarranted.

"Glycerina" and "Lupulina" should be respectively *Glycerinum* and *Lupuli Glandula*. To those who will calmly reflect upon the matter, these proposed improvements will appear worthy of serious and unbiased consideration. Such consideration will probably lead to the conclusion that the adoption of the changes recommended will not be coupled with any serious difficulty. Even if physicians should for a long time continue to write Tinctura Hyoscyami, Ol. Lavandulæ, Magnesia, and Spir. Æther. Nitr. instead of Hyoscyami Tinct., Ætherol. Lavand., Magnes. Oxid., and Æther. Nitr. Spir., there surely could be no misunderstanding about what they meant, nor any inconvenience resulting from it, even if the pharmacopœia should not contain a list of the changes, which of course it would do.

Rigid conservatism may be proper in the question of admitting new remedies into the pharmacopœia; but the idea that we must make a pharmacopœia which is on a

level with the great majority of the physicians and pharmacists *in all things* might well be modified so as to admit of the adoption of obvious practical improvements even if entirely new, should it be found that no evil results can possibly follow, for it is but reasonable to expect that the periodical revisions of our standard guide may be made the means of gradually elevating the general standard of knowledge and practice, taking it for granted that "the many" will readily and cheerfully consent to any reasonable changes which can be at once *understood*, or which cannot cause any difficulty whether at once generally *accepted* or not.

It has been argued as against any change in the *chemical pharmacopœial* nomenclature, that chemical theory and nomenclature are constantly changing. That they are ever changing is true, and no one would wish it to be otherwise, since the established changes in any science mark its progress. Instead of waiting for science to come to a halt, let us keep up with it. Its progress will *never* cease, but it will not be so rapid as to make it impossible for us to follow, unless we prefer to be left behind. All life is change.

The changes suggested in this paper have been laid before the Committee of Revision and Publication of the Pharmacopœia. A vote has already been taken upon them, which indicates that there is considerable difference of opinion, and yet a majority of the votes cast are in favor of most of the propositions.

I have purposely proposed to the Chairman of the Committee, Mr. Charles Rice, to set that vote aside in order that the members of the Committee may consult the members of the American Pharmaceutical Association, if they desire, and in order that the whole matter may be thoroughly discussed before it is finally decided, as I am confident, not only that the changes recommended ought to be made, but that the judgment of the Committee will be influenced by that of this great gathering.

It is proper to call attention to the fact that the Pharmacopœial Convention of 1880 instructed the Committee of Revision and Publication to state the chemical formulæ of all definite inorganic compounds *in accordance with the new chemistry*, which would seem to require that a

nomenclature be also adopted which is in perfect harmony with the formulæ to be given in the pharmacopœia.

I sincerely hope and believe that the forthcoming pharmacopœia of the United States will be one which the medical and pharmaceutical professions of the country can receive with approval.

N. B. Since reading the above paper before the Association, it has occurred to me that it would be highly desirable and quite proper to ignore the possessive case in a technical nomenclature, which is used by a class of men who have absolutely no need of Latin or Greek as a language, but only use it as a necessary evil for the reasons stated in my paper, and who certainly as a universal rule know little or nothing of Latin and care not to waste their time in acquiring even sufficient knowledge of Latin grammar to appreciate the correctness or incorrectness of the form in which the nomenclature may be put. Prof. O. A. Wall, of St. Louis, expressed to me the opinion that it would be better if physicians made no attempt whatever to write their prescriptions in correct Latin form, but would write "OLEUM Ricini, ℥ i.," instead of "OLEI Ricini ℥ i., etc. I agree fully with him. But why not relieve physicians and pharmacists of all unnecessary Latin grammar, and simply use the nominative case everywhere? Latin scholars might criticise a nomenclature so constructed; but the pharmacopœial nomenclature is not intended to satisfy scholarly taste or even base grammar. In fact the pharmacopœial nomenclature is constructed purely for technical purposes, and therefore there can be no impropriety in constructing it without regard to an observance in it of grammatical rules which are rarely if at all observed in daily routine, for the very good reason that a vast majority of those who use the Latin pharmacopœial names do not know any Latin at all.

What difference does it make to physician or pharmacist whether he knows or does not know the possessive form of Rhus, Physostigma, Anthemis, Spiritus, Semina, Eri-geron, Cornus, Juglans, Macis, Marmor, Kino, Matico, Pepo, Rhizoma, Filix Mas, Rubus, Ribes, Sago, Sassafras, Sulphis, Asclepias, etc. And what a relief it would be to get rid of the necessity of knowing it. It is simply a question of arbitrary agreement. The loss sustained

by such a change would in no wise be felt, while the gain would be a practical one.

It is clearly quite as explicit to say *Arnica Radix* as to say *Arnicae Radix* and surely *Rhois Toxicodendri Tinctura* would not be as readily understood as *Rhus Toxicodendron Tinctura*. I earnestly believe, therefore, that we should drop the possessive case in the Latin pharmacopœial nomenclature, and also the word "et" wherever it occurs in the names of compound preparations.

The list of the new names which might be adopted in accordance with the principles set forth in this paper and which accompanied the latter as a necessary part of it, would be too long for publication in *NEW REMEDIES*. It would require all of its available space to the exclusion of all else.

For the sake of illustration, the following titles are selected from the list of proposed new names submitted to the Committee of Revision and Publication of the Pharmacopœia of the United States :

Acidum Hydrochloricum instead of Acidum Muriaticum.	
Antimoniosum Oxidum	" Antimonii Oxidum.
Solutio Chlorig	" Aqua Chlorinii.
Calx Sulphurata	" Calcii Sulphuretum.
Calcicum Oxidum	" Calx.
Colchici Cormus	" Colchici Radix.
Ferricum Chloridum	" Ferri Chloridum.
Ferrico-Ferrosus Phosphas	" Ferri Phosphas.
Ferrosium Iodidum	" Ferri Iodidum.
Jalapæ Tubera	" Jalapa
Solutio Ferrici Citratis	" Liquor Ferri Citratis.
Morphina	" Morphia.
Ætheroleum Amygd. Amar.	" Ol. Amygd. Amar.
Oleum Amygdalarum	" Ol. Amygd. Express.
Potassicum Iodidum	" Potassii Iodidum.
Quininius Sulphas	" Quiniæ Sulphas.
Sabinæ Ramuli	" Sabina.
Sodicus Carbonas	" Sodii Carbonas.
Syrupus Sacchari	" Syrupus.
Unguentum Adipis	" Unguentum.
Zingiberis Rhizoma	" Zingiber.

